and dressed with dry aseptic materials. This last animal continued to live, the wound healing in three weeks with some slight suppuration. The control animal died eleven days after the infection with an extensive phlegmonous process, and suppuration in the knee-joint. The same experiment was performed upon a second pair of rabbits, with exactly the same result.

From these observations it may be concluded that the treatment or irrigation of the tissues with 3-per-cent. carbolic solution, as was the practice of surgeons in the antiseptic era, in nowise diminishes the vital energy of the tissues against pyogenic cocci, or predisposes the tissues to suppuration ; in fact, from the above experiments, the very opposite seems to be the case.—*Verhandlungen der deutschen Gesellschaft für Chirurgie*, XXIII Kongress, 1894.

IV. The Spreading of Suppurative Diseases in Closed Institutions. By Dr. C. REGER. This author, who has for many years busied himself with the study of epidemics, and who has appeared before many scientific bodies with his studies of the dissemination of various infectious diseases based upon a large amount of material, has in this paper presented a vast table dealing especially with the suppurative diseases from the very beginning of their course.

First are given the typical cases of (*a*) measles, rötheln, and varicella, and (*b*) diphtheria, scarlatina, influenza, pneumonia, erysipelas, and conjunctivitis. He shows with these examples that notwithstanding the immediate isolation of the initial cases, they were followed in the course of time by another outbreak, after which came another pause followed by another outbreak in regular intervals. Consequently the spreading of the disease can only take place by a changing of the host, and consequently the living man is essential for a continuation of the disease, for it is not contagious during the period of incubation, but becomes contagious when the micro-organisms reach their full development. Therefore, the rooms and utensils used about the patient are matters of but little importance in the transmission of these diseases.

While it can be shown that in the first-named group of specific

diseases the cases go on one after another in an unbroken chain, in the second group the chain is longer but is repeatedly interrupted. It often happens that at the place where a certain disease is expected another disease appears which has a different name, but which clinically has much in common. This occurs among the large group of pus-diseases. Belonging to this group Reger finds catarrhs and inflammations of the mucous membrane of the respiratory and digestive tracts, the anginæ, the inflammatory diseases of the auricular canal, rheumatism, inflammations of the serous membranes, and the skin, and also the diseases accompanied with suppuration or with formation of muco-pus, serum, or fibrin, and which have been regarded as partially due to the contact with pus or dirt, or to the influence of external or climatic causes or to the existence of a diathesis.

The author himself is aware that the classification of such apparently heterogeneous diseases under a single group is rather unusual. He has, by constant observation of these diseases, been led to the conclusion that we have classified our diseases and named them, in the fulness of our ignorance of etiology, from some predominant symptom or from some organ which is especially or most commonly involved in the given disease.

He has observed a perfect regularity in the progress of these pus-diseases, which is exactly similar to that observed in the specific infectious diseases.

The related diseases follow one another in single cases or in groups in seven or fourteen days' intervals, so that when a type has once appeared it can be followed for months or even for a year with almost perfect clearness. In such cases it is evident that one or another of the micro-organisms of the group probably exercises a specific action and gives the peculiar character to the disease, and diseases with the same or similar names follow one another. Then, also other cases, appearing separately or in groups, form the links of the chain. Here also it appears that links of the chain may be missing, and this interval may represent the governing type of the disease. For this reason it may happen that here in the typical place diseases

must have been present, which were so mild that they were not recognized at all by the physician.

The author has demonstrated a further important fact that a repeated attack in the same individual, designated as relapse, complication or recurrence, of the dominant type, is nothing more than a new second or third or fourth generation of the micro-organism in the old host. Here also it may happen that the long interval between the outbreaks points simply to the multifariousness of the dominant type, and means that the disease during the intervals has been so mild as not to be recognized.

Consequently, Reger claims that the related diseases present only a local expression of the general infection with its large number of mixed bacteria. This is influenced by the disposition of the individual and by the opportunity offered by the point of diminished resistance, or by the tendencies of the various germs, to appear sometimes in one place, sometimes in another.—*Verhandlungen der deutschen Gesellschaft für Chirurgie*, XXIII Kongress, 1894.

V. The Question of the Spontaneous Healing of Cancer in Man. By Dr. EMIL SENGER (Krefeld). Senger has given especial attention to the carcinomata which are caused by chronic inflammatory irritation, as the carcinoma scroti of the chimney-sweep, "tar cancer," etc. For the past four years he has studied the tumors of the buccal cavity, which develop on the cheek or tongue opposite an irritating tooth. These tumors can be observed at a very early period in their development, and can be carefully followed during their extension. Senger found after the extirpation of these tumors that they presented the microscopic structure which every pathologist would regard as carcinomatous.

In order to decide the question as to whether these tumors are really carcinoma or not, and what the result would be after removal of the cause, Senger has experimented in two cases. He divided the tumor into two halves, extirpated one-half for microscopic examination and left the other for further observation. At the same time he